

CLAIMS

What is claimed is:

1. A cuff for use in inferential measurement of animal systolic and/or mean and/or diastolic blood pressures, comprising:

- a) an elongate outer layer of material;
- b) an elongate inner layer of material attached to said outer layer of material along adjacent edges thereof; and
- c) an inflatable elongate bladder disposed between said inner and outer material layers, said bladder having first and second elongate ends and first and second lateral edges,

wherein said bladder is attached to said inner and outer layers along said first and second elongate bladder ends, and is free of said inner and outer layers along said first and second lateral bladder edges.

2. A cuff in accordance with Claim 1 wherein said first and second elongate ends and said outer and inner material layers are connected such that said cuff defines a tubular shape wherein said outer layer defines an outer surface thereof and said inner layer defines an inner surface thereof.

3. A cuff in accordance with Claim 1 wherein said material forming said inner layer is dimensionally elastic and said material forming said outer layer is dimensionally inelastic.

4. A cuff in accordance with Claim 3 wherein said inner layer material is provided with means for inhibiting permeation of water through said material.

5. A cuff in accordance with Claim 1 wherein said bladder is attached to an outer layer of said cuff between said first and second elongate bladder ends.

6. A cuff in accordance with Claim 1 further comprising a second relatively stiff intermediate layer disposed between said bladder and said outer layer for providing structural support for said cuff.

7. A cuff in accordance with Claim 6 wherein said second layer is formed of rollable plastic sheeting.

8. A cuff in accordance with Claim 1 wherein said outer layer material is selected from the group consisting of nylon shell and rollable plastic sheeting.

9. A cuff in accordance with Claim 1 further comprising means for connection of said bladder to a controllable source of pressurized air.

10. A cuff in accordance with Claim 9 wherein said source is an automated blood pressure measurement machine.

11. A cuff in accordance with Claim 2 wherein said cuff is suitable for incorporation into an automated blood pressure measurement machine.

12. A cuff in accordance with Claim 2 wherein said cuff is suitable for stand-alone use.

13. A cuff in accordance with Claim 2 wherein said cuff is suitable for use on subjects having arm circumferences between about 18 cm and about 50 cm.

14. A closed cuff for use in inferential measurement of animal systolic and/or mean and/or diastolic blood pressures, comprising:

- a) an outer layer of material;
- b) an inner layer of material attached to said outer layer of material along adjacent edges thereof, said attached inner and outer layers being formed into a tubular shape, said outer layer defining an outer surface thereof and said inner layer defining an inner surface thereof; and
- c) an inflatable ring-shaped bladder disposed between said inner and outer material layers.

15. An automated blood pressure measurement machine, comprising:

- a) a cylindrical housing for receiving an inflatable cuff; and
- b) an inflatable cuff disposed in said housing, said cuff having an elongate outer layer of material, an elongate inner

layer of material attached to said outer layer of material along adjacent edges thereof, and an inflatable elongate bladder disposed between said inner and outer material layers, said bladder having first and second elongate ends and first and second lateral edges, wherein said bladder is attached to said inner and outer layers along said first and second elongate bladder ends, and is free of said inner and outer layers along said first and second lateral bladder edges.